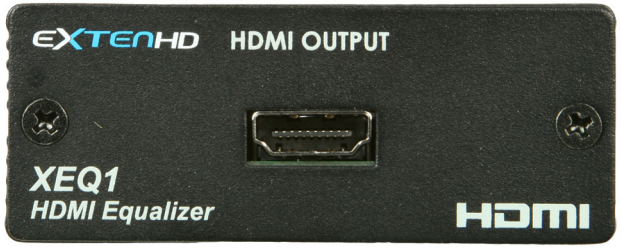
Professional HDMI Equalizer

Model XEQ1

Operation Manual



©2007 Sima Products Corporation
140 Pennsylvania Ave. Bldg #5
Oakmont, PA 15139
www.entenhd.com
ExtenHD™ is a registered trademark of Sima Products Corporation
PN 21762

Caution:

IMPORTANT SAFEGUARDS FOR AUDIO PRODUCTS. PLEASE READ CAREFULLY THE FOLLOWING IMPORTANT SAFEGUARDS THAT ARE APPLICABLE TO YOUR EQUIPMENT

1. Read instructions - All the safety and operating instructions should be read before the appliance is operated.
2. Retain instructions - The safety and operating instructions should be retained for future reference.
3. Heed Warnings - All warnings on the appliance and in the operating instructions should be adhered to.
4. Follow instructions - Follow all operating and use instructions.
5. Water and Moisture - the appliance should not be used near water - for example: near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement or near a swimming pool.
6. Ventilation - The appliance should be located so that its location or position does not interfere with proper ventilation. For example: the appliance should not be situated on a bed, sofa, rug or similar surface that may block the ventilation openings.
7. Heat - keep away from heat sources such as radiators, registers, stoves or other heat-producing appliances .
8. Power sources - the appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
9. Grounding or polarization. - Precautions should be taken so that the polarization or grounding means of the appliance is not defeated. ***Caution: To prevent electric shock, match the wide blade of this plug to the wide slot, fully insert. Do not use this polarized plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.***
10. Power cord Protection - Power supply cords should be routed so they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and where they exit from the appliance.
11. Cleaning - Wipe unit with a damp cloth occasionally to keep it looking new. Do not use harsh chemicals, cleaning solvents or strong detergents.
12. Nonuse periods - The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
13. Object and Liquid entry - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
14. Damage requiring service - The appliance should be serviced by qualified personnel when: the power cord has been damaged, objects have fallen or liquids spilled into the appliance, the appliance has been exposed to rain, does not appear to operate normally or exhibits a marked change in performance or the unit has been dropped or the enclosure damaged.
15. Service - The user should not attempt to service the appliance beyond that described in the operating manual. All other servicing should be referred to qualified service personnel.

Notice to Users

The system may cause interference to a TV or radio even when it is operating properly. To determine whether the system is causing the interference, turn it off. If the interference goes away, the system is causing the interference.

Tested To Comply With FCC Standards For Home or Office Use

NOTE: This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be deter-mined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- **Reorient or relocate the receiving antenna.**
- **Increase the separation between the equipment and receiver.**
- **Connect the equipment into an outlet on a circuit different from that to which the receiver is needed.**
- **Contact your dealer for help.**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two Conditions:
1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

©2007 by Sima Products Corp. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without prior written permission from Sima Products Corp.

One year Limited Warranty

Sima Products Corporation, ("Sima") warrants that if the accompanying product proves to be defective to the original purchaser in material or workmanship within one (1) year from the original retail purchase, the Company will, at the its option, either repair or replace same without charge (but no cash refund will be made).

What you must do to enforce Warranty
You must deliver, mail or ship the product, together with the original bill of sale, this limited Warranty statement as proof of warranty coverage to:

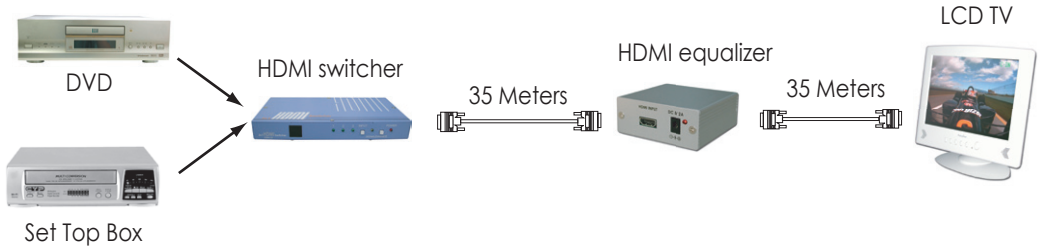
Sima Products Corporation
Attn: Customer Service
140 Pennsylvania Ave., Bldg. #5,
Oakmont, PA 15139

Fax: 412-828-3775

It is recommended that you call Sima Products Corporation before sending the unit in for service.

Limitation of Liability and Remedies
This warranty is void if any defects are caused by abuse, misuse, negligence or unauthorized repairs. All liability for incidental or consequential damages is specifically excluded. The Company shall have no liability for any damages due to lost profits, loss of use or anticipated benefits, or other incidental, consequential, special or punitive damages arising from the use of, or the inability to use, this product, whether arising out of contract, negligence, tort or under any warranty, even if the Company has been advised of the possibility of such damages. The Company's liability for damages in no event shall exceed the amount paid for this product. The Company neither assumes nor authorizes anyone to assume for it any other liabilities.
Some states do not allow for the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights and you may have other rights, which vary from state to state.

Installation



Specificiations

* Compliant with HDMI 1.3
* HDCP is compliant with HDCP 1.1 downward compatible to HDCP 1.0
* HDCP pass through.
* Operation frequency : Up to 225MHz
* HDMI data rate: 2.25 Gbps(single link)
* Input/Output resolutions:
  PC: VGA, SVGA, XGA, SXGA, UXGA up to 225MHz
  HD: 480i/576i, 480p/576p, 720p, 1080i, 1080p
* Dimension: 72(D)x 76(W)x 30(H)mm
* Power: 5V DC

I

Introduction

The unit is a high performance cable equalizer allows HDMI/DVI cable runs up to 70 meters. It will eliminate digital noise (sparkles) to ensure you to receive perfect HDTV picture after long cable transmission.

Features

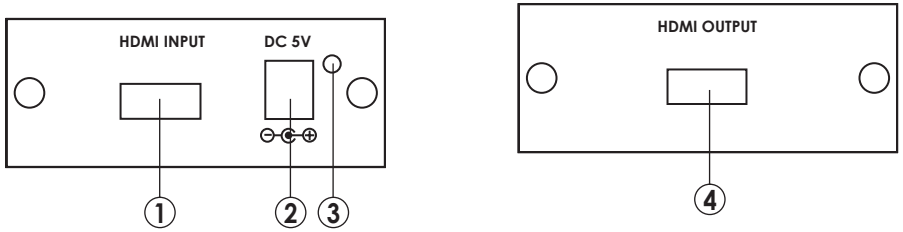
- Extend cable runs up to 70 meters-35 meters from the source to the equalizer plus 35 meters from the equalizer to the projector, TV/ monitor.
- Maintains high HDMI single link video resolution up to UXGA/1080p.
- Can be powered directly from the cable. However, it's recommended to use external power adaptor for long cable application.
- HDCP compliant, HDMI is backward compatible with DVI.
- Plug and play, easy to install.

This package includes

1. The HDMI equalizer box.
2. 5V DC power adaptor.
3. User manual.

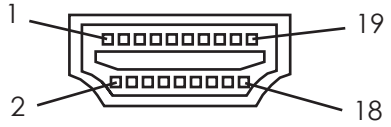
Operation Controls and Functions

Front Panel ***Rear Panel***



1. **HDMI Input:** Connects to the HDMI output connector of your source equipment.
2. **DC power plug.**
3. **Power LED.**
4. **HDMI output:** Connects to the HDMI input connector of your display unit.

HDMI Connector Pin Assignment



Pin#	Function Assignment	Pin#	Function Assignment
1	TMDS Data2+	2	TMDS Data2 Shield
3	TMDS Data2-	4	TMDS Data1+
5	TMDS Data1 Shield	6	TMDS Data1-
7	TMDS Data0+	8	TMDS Data0 Shield
9	TMDS Data0-	10	TMDS Clock+
11	TMDS Clock Shield	12	TMDS Clock-
13	CEC	14	Reserved (N.C. on device)
15	SCL	16	SDA
17	DDC/CEC Ground	18	+5V Power
19	Hot Plug Detect		